

### ABSTRACT

A multiplier circuit is disclosed for multiplying a multiplicand by a multiplier. The multiplier circuit includes a partial product generator and a partial product adder. The partial product generator includes a first input to receive a multiplicand; a second input to receive a multiplier; partial product generation means for producing a plurality of partial products based on the multiplicand and the multiplier; and an output coupled to the partial product generation means to provide the plurality of partial products. The partial product adder includes an input coupled to the output of the partial product generator; a plurality of adders to add the plurality of partial products to produce a final product, the plurality of adders comprising a plurality of compressors having substantially the same width; and an output coupled to the plurality of adders to provide the final product.